

**AL-Ayen University**  
**College of Health and Medical Technology**  
**Department of Anesthesia**



# Oropharyngeal airway & Nasopharyngeal airway

**Lecture (7) theoretical**  
**Basics of Anesthetic Equipment (1)**  
**2nd Stage**  
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## Description:

➤ Made up of **elastomeric material, plastic or rubber**

➤ **Parts :**

1. **Flange:** at the buccal end / prevents it from moving deeper into the mouth cavity/ helps to fix the airway
2. **Bite portion:** short and firm portion, that fits between the teeth and prevents occlusion of the airway
3. **Curved air channel:** corresponds with the shape of the tongue and the palate

➤ **Size:** Determined by a number that is the length in centimeters (American national standard)



## Uses:

1. Helps to maintain an open airway in an unconscious person
2. Prevents the patient from biting an endotracheal tube
3. Protect the tongue from biting
4. Facilitate oropharyngeal suctioning
5. Provides a pathway for inserting devices into the esophagus and pharynx.



## Indications:

1. • An oropharyngeal airway (oral airway, OPA) is an airway adjunct used to maintain or open the airway by stopping the tongue from covering the epiglottis. In this position, the tongue may prevent an individual from breathing. This sometimes happens when a person becomes unconscious because the muscles in the jaw relax causing the tongue to obstruct the airway.
2. • During bag-mask ventilation with OPA support we can provide proper ventilations.
3. • Intubation patient to prevent biting ET tube.

## Contraindications:

1. Intact gag reflex
2. Presence of a foreign body
3. Active bleeding
4. Chances of vomiting
5. Inadequate small size - worsen obstruction by kinking the tongue and pushing it against the roof of the mouth
6. Too big size can cause epiglottis posteriorly and traumatize the larynx
7. Damage to oral structure and dentition



## Technique of insertion:

1. The pharyngeal and laryngeal reflexes should be depressed
2. Correct size is estimated by holding the airway next to the patient's mouth.
3. Lubricate the airway with water base jelly if possible
4. The jaw is opened with the left hand by 'crossed or scissors' technique
5. The airway is inserted with the concave side facing the upper lip
6. When the junction of the bite portion and the curved portion is near the incisors, the airway is rotated 180° and slipped behind the tongue into the final position



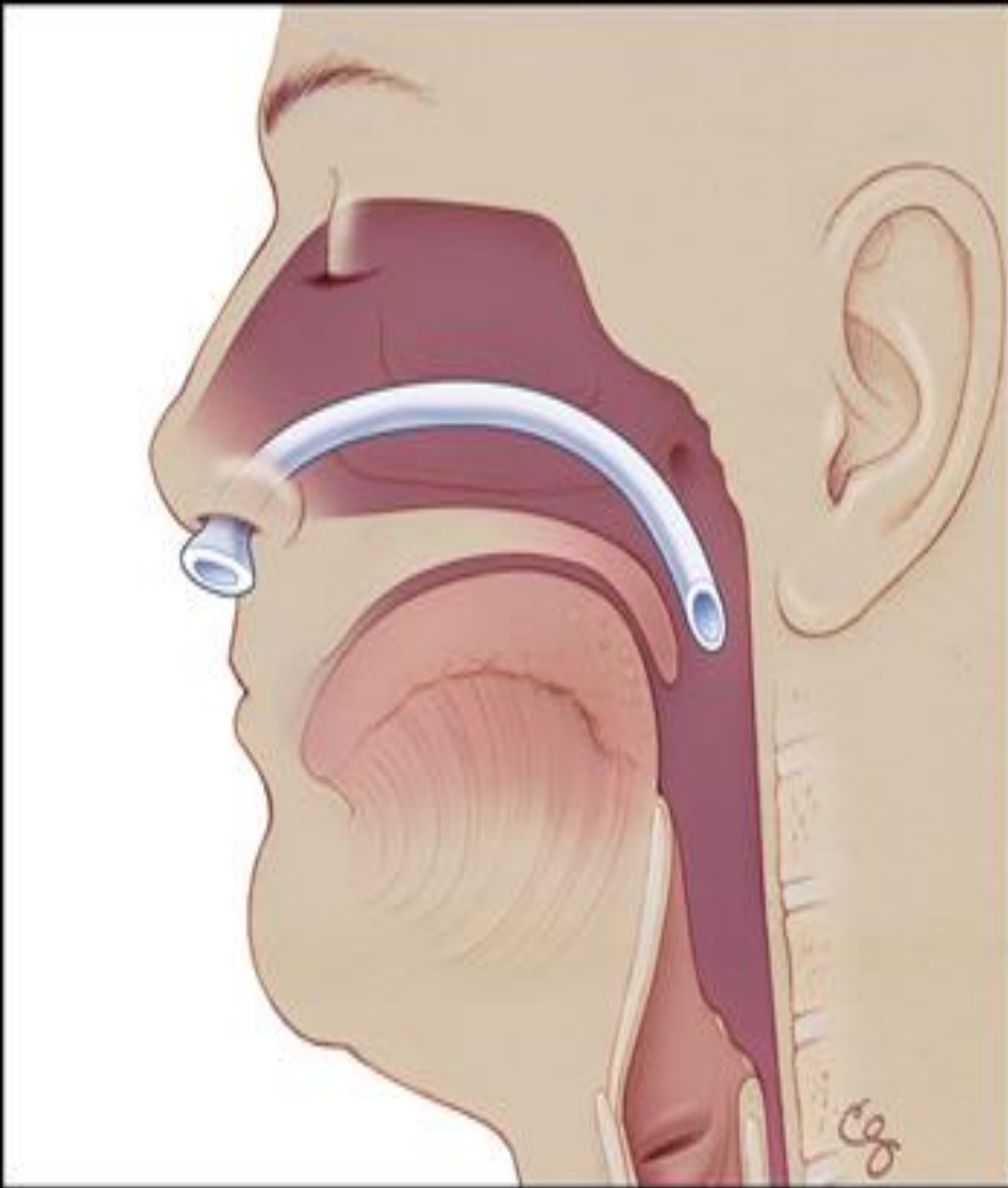
## Complications:

1. • Complications potentially caused by the use of oropharyngeal airways are that it may induce vomiting which may lead to aspiration.
2. • Additionally, it may cause or worsen airway obstruction if an inappropriately sized airway is used (i.e., too small).
3. • An inappropriately sized airway can also cause laryngospasm (i.e., too big).
4. • damage to the oral structures or dentition can also result from oropharyngeal airway insertion.

## Nasopharyngeal airway device:

A nasopharyngeal airway device (NPA) is a hollow plastic or soft rubber tube that a healthcare provider can use to assist patient oxygenation and ventilation in patients who are difficult to oxygenate or ventilate via bag-mask ventilation.

- NPAs are passed into the nose and through to the posterior pharynx.
- NPAs do not cause patients to gag and therefore, are the best airway adjunct in an awake patient and a better choice in a semiconscious patient who may not tolerate an oropharyngeal airway due to the gag reflex



## Indications:

- ✓ • NPA is used for conscious, semiconscious, or unconscious patient.
- ✓ • NPAs are also helpful when a patient's mouth is difficult to open or access, for example, in cases of trismus or angioedema.
- ✓ • OPA is not possible.
- ✓ • Gag reflex, massive trauma around the mouth.

## Contraindications:

- **Absolute contraindications:**

- NPA and NT intubation include signs of basilar skull fractures, facial trauma, and disruption of the midface, nasopharynx or roof of the mouth.

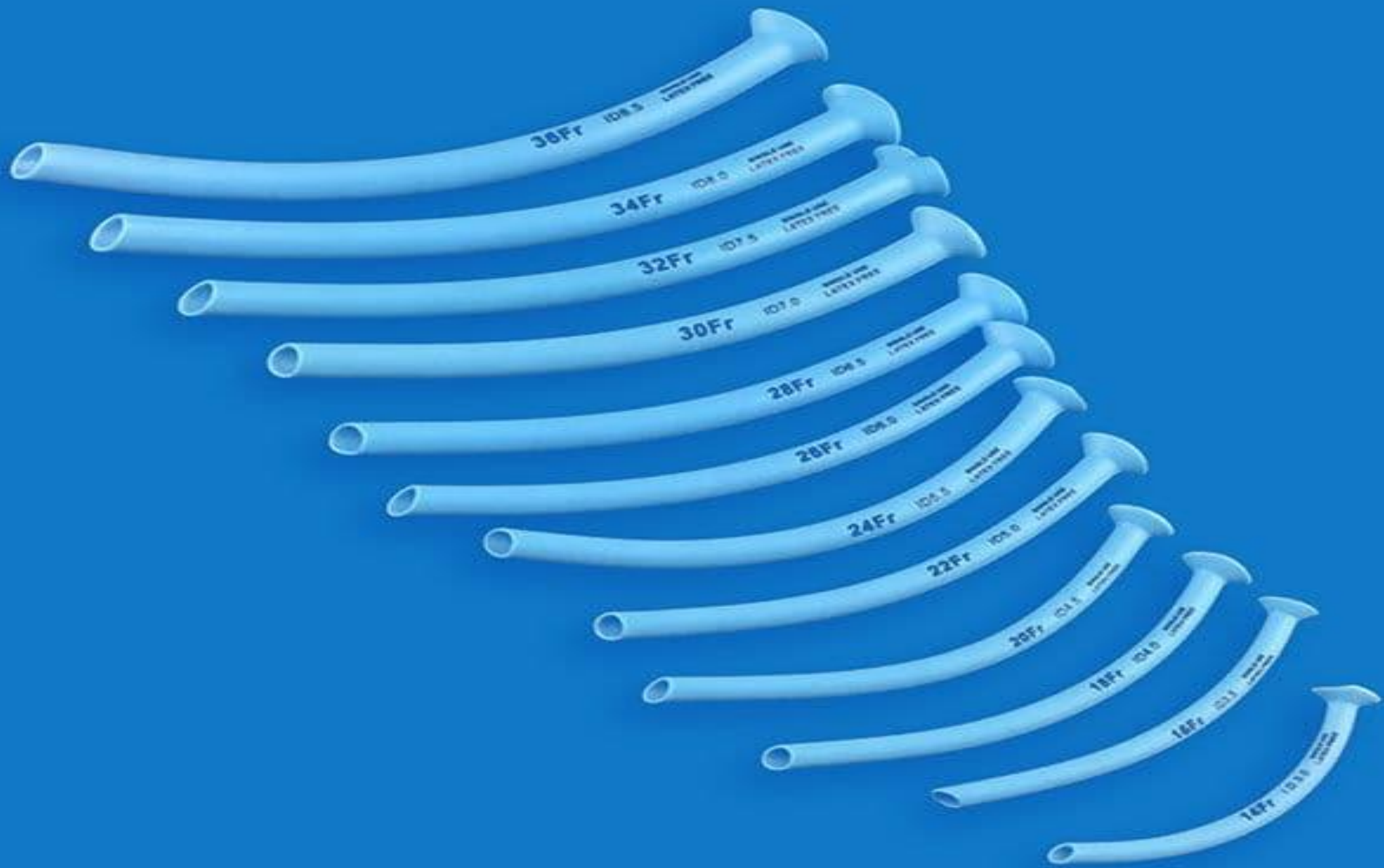
- **Relative contraindications:**

- Include suspected epiglottitis, coagulopathy patients (including those taking anti-coagulants) due to the risk of hemorrhage, large nasal polyps, and recent nasal surgery.



## Complications:

1. Airway obstruction
2. Trauma – nose , posterior pharynx
3. Tissue oedema
4. Ulceration and necrosis
5. Retention, aspiration, swallowing
6. Latex allergy
7. Gastric distention
8. Equipment failure



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Thank you